## DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-014203 Address: 333 Burma Road **Date Inspected:** 09-Mar-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Xu Xian Ping No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG Sub-Assembly

## **Summary of Items Observed:**

On this day Caltrans OSM Quality Assurance (QA) Inspector Stefan Holmes was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhen Hua Port Machinery Company (ZPMC) at Chang Xing Island in Shanghai, China.

This QA Inspector observed the following work in progress:

### BAY 1:

Flux Cored Arc Welding (FCAW) of 20TR2-022; Weld(s) 017. Welder(s) are identified as 215397. ZPMC Quality Control (QC) is identified as Xiang Feng Feng. Weld Procedure Specification (WPS) is identified as WPS-B-T-2231-TC-U5-F. Welding appears to conform to the requirements of the WPS used.

Flux Cored Arc Welding (FCAW) of 20TR1-017; Weld(s) 001. Welder(s) are identified as 219188. ZPMC Quality Control (QC) is identified as Xiang Feng Feng. Weld Procedure Specification (WPS) is identified as WPS-B-T-2231-TC-U5-F. Welding appears to conform to the requirements of the WPS used.

### BAY 2:

Flux Cored Arc Welding (FCAW) pursuant to Critical Weld Repair #B-CWR1096 (Buttering for length) of 10TR2-013. Welder(s) are identified as 048443. ZPMC Quality Control (QC) is identified as Yang Qing Feng. Weld Procedure Specification (WPS) is identified as WPS-345-FCAW-2G(2F)-Repair-1. Welding appears to

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conform to the requirements of the WPS and CWR used.

Flux Cored Arc Welding (FCAW) pursuant to Critical Weld Repair #B-CWR1096 (Buttering for length) of 10TR2-022. Welder(s) are identified as 045203. ZPMC Quality Control (QC) is identified as Yang Qing Feng. Weld Procedure Specification (WPS) is identified as WPS-345-FCAW-2G(2F)-Repair-1. Welding appears to conform to the requirements of the WPS and CWR used.

Flux Cored Arc Welding (FCAW) pursuant to Critical Weld Repair #B-CWR1096 (Buttering for length) of 10TR1-004. Welder(s) are identified as 045240. ZPMC Quality Control (QC) is identified as Yang Qing Feng. Weld Procedure Specification (WPS) is identified as WPS-345-FCAW-2G(2F)-Repair-1. Welding appears to conform to the requirements of the WPS and CWR used.

Flux Cored Arc Welding (FCAW) pursuant to Critical Weld Repair #B-CWR1096 (Buttering for length) of 10TR2-014. Welder(s) are identified as 048443. ZPMC Quality Control (QC) is identified as Yang Qing Feng. Weld Procedure Specification (WPS) is identified as WPS-345-FCAW-2G(2F)-Repair-1. Welding appears to conform to the requirements of the WPS and CWR used.

Flux Cored Arc Welding (FCAW) pursuant to Critical Weld Repair #B-CWR1096 (Buttering for length) of 10TR2-002. Welder(s) are identified as 045209. ZPMC Quality Control (QC) is identified as Yang Qing Feng. Weld Procedure Specification (WPS) is identified as WPS-345-FCAW-2G(2F)-Repair-1. Welding appears to conform to the requirements of the WPS and CWR used.

## BAY 5:

Flux Cored Arc Welding (FCAW) pursuant to Weld Repair Report #B-WR10127 (for UT reject) of 10TR3-027; Weld(s) 014. Welder(s) are identified as 215248. ZPMC Quality Control (QC) is identified as Shen Jian Guo. Weld Procedure Specification (WPS) is identified as WPS-345-FCAW-2G(2F)-Repair-1. Welding appears to conform to the requirements of the WPS and WRR used.

Flux Cored Arc Welding (FCAW) pursuant to Critical Weld Repair #B-CWR1102 (Buttering for length) of 11TR1-015. Welder(s) are identified as 215689. ZPMC Quality Control (QC) is identified as Shen Jian Guo. Weld Procedure Specification (WPS) is identified as WPS-345-FCAW-2G(2F)-Repair-1. Welding appears to conform to the requirements of the WPS and CWR used.

Flux Cored Arc Welding (FCAW) pursuant to Critical Weld Repair #B-CWR1102 (Buttering for length) of 10TR4-003. Welder(s) are identified as 204342. ZPMC Quality Control (QC) is identified as Shen Jian Guo. Weld Procedure Specification (WPS) is identified as WPS-345-FCAW-2G(2F)-Repair-1. Welding appears to conform to the requirements of the WPS and CWR used.

Flux Cored Arc Welding (FCAW) pursuant to Critical Weld Repair #B-CWR1102 (Buttering for length) of 10TR3-016. Welder(s) are identified as 222387. ZPMC Quality Control (QC) is identified as Shen Jian Guo. Weld Procedure Specification (WPS) is identified as WPS-345-FCAW-2G(2F)-Repair-1. Welding appears to conform to the requirements of the WPS and CWR used.

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Flux Cored Arc Welding (FCAW) pursuant to Critical Weld Repair #B-CWR1102 (Buttering for length) of 11TR2-012; Weld(s) 014. Welder(s) are identified as 222387. ZPMC Quality Control (QC) is identified as Shen Jian Guo. Weld Procedure Specification (WPS) is identified as WPS-345-FCAW-2G(2F)-Repair-1. Welding appears to conform to the requirements of the WPS and CWR used.

### BAY 6:

Flux Cored Arc Welding (FCAW) of USPL1-367; Weld(s) 001 and 002. Welder(s) are identified as 053609. ZPMC Quality Control (QC) is identified as Liu Chuan Gang. Weld Procedure Specification (WPS) is identified as WPS-B-T-2231-TC-U4b-F. Welding appears to conform to the requirements of the WPS used.

Flux Cored Arc Welding (FCAW) of USPL1-369; Weld(s) 001 and 002. Welder(s) are identified as 217185. ZPMC Quality Control (QC) is identified as Liu Chuan Gang. Weld Procedure Specification (WPS) is identified as WPS-B-T-2231-TC-U4b-F. Welding appears to conform to the requirements of the WPS used.

Flux Cored Arc Welding (FCAW) of USPL1-336; Weld(s) 001 and 002. Welder(s) are identified as 220069. ZPMC Quality Control (QC) is identified as Liu Chuan Gang. Weld Procedure Specification (WPS) is identified as WPS-B-T-2231-TC-U4b-F. Welding appears to conform to the requirements of the WPS used.

### **BAY 7:**

Flux Cored Arc Welding (FCAW) pursuant to Weld Repair Report #B-WR10536 (for UT reject) of 11TR3-020; Weld(s) 005. Welder(s) are identified as 053753. ZPMC Quality Control (QC) is identified as Xia Yong Zheng. Weld Procedure Specification (WPS) is identified as WPS-345-FCAW-2G(2F)-Repair-1. Welding appears to conform to the requirements of the WPS and WRR used.

Flux Cored Arc Welding (FCAW) pursuant to Weld Repair Report #B-WR10553 (for UT reject) of 11TR3-005; Weld(s) 014. Welder(s) are identified as 053742. ZPMC Quality Control (QC) is identified as Xia Yong Zheng. Weld Procedure Specification (WPS) is identified as WPS-345-FCAW-2G(2F)-Repair-1. Welding appears to conform to the requirements of the WPS and WRR used.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

# **Summary of Conversations:**

No relevant conversations.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Holmes, Stefan **Inspected By:** Quality Assurance Inspector

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**Reviewed By:** Hall,Steven QA Reviewer